

Page 17, substitute the paragraph beginning at line 1, with the following rewritten paragraph:

---

B3 --This may be of particular advantage in the field of fibre optic links where signal insertion losses into fibre may be reduced. Furthermore, the individual elements in the laser device may be coherently locked such that coherent summation into a single passive waveguide output is obtained for input to a single optical fibre. This is more convenient than having to use a ribbon of optical fibres.--

---

### IN THE CLAIMS

The PTO clerical staff is respectfully requested to place the claims in the form as received from WIPO, i.e., claims 1-17. These claims were attached to the International Preliminary Examination Report and are stamped "AMENDED SHEET" at the bottom of each page. Inasmuch as it is these claims which were to have been preliminary amended, applicants' include a restatement of the amendments to be made to these claims.

Please substitute the following amended claims for corresponding claims previously presented. A copy of the amended claims showing current revisions is attached.

---

B4 3. (*Amended*) The light emitting device of Claim 1, wherein the light emitting means (2a, 2b) are electrically connected such that the input impedance of the light emitting device is substantially equal to 50  $\Omega$  without additional circuitry or impedance matching elements.

---

9. (Amended) An optically coupled transistor (18) for generating an output electrical signal comprising;

the light emitting device (1; 21) of Claim 1 for emitting at least two beams of output radiation (29) and

B5  
at least one photodetector (23) for detecting the beams of radiation output (29) from the light emitting device (1) and for converting the beams of output radiation (29) into an output electrical current  $I_c$ ),

wherein the light emitting device (1) and the at least one photodetector (23) are arranged such that there is no electrical feedback from the at least one photodetector (23) to the light emitting device (1).

16. (Amended) An optical repeater for receiving an optical input signal and generating one or more optical output signals comprising;

B4  
a photodetector (23) for receiving the optical input signal and converting the optical input signal into an electrical signal and

the light emitting device (1) of Claim 1 for receiving the said electrical signal and outputting one or more optical signals.